BIG DATA

MARKETING

**ENGAGE YOUR CUSTOMERS
MORE EFFECTIVELY
AND DRIVE VALUE**

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Foreword

Why did you get into marketing? I am guessing that it's not because you had a burning desire to refine propensity models until the wee hours of the morning, or to wrestle with integrating social media comments with web clickstream data. But those are exactly the kinds of activities that make marketers great these days. The function is undergoing a dramatic transformation toward a world of data-driven decisions that this book describes in detail. You may have gravitated toward marketing because it is one of the most creative areas of business, and you still need to possess that attribute to succeed. But creativity is increasingly judged not only in the human imagination, but also in clickthroughs, conversions, and lift.

Marketing is not, of course, the only area of business undergoing this transformation. Few people enter the retail industry because they have a fascination with point-of-sale data, and few baseball fans want to work for a team so they can compute its Pythagorean winning percentage. The world in general is becoming more data-driven, and the change in marketing is only one example of that overall shift.

However, as Lisa Arthur details in the chapters that follow, the change in marketing is especially dramatic. In little more than a decade, the function has gone from emphasizing pretty pictures and catchy phrases to one that captures, integrates, and analyzes data of all types. Needless to say, many marketers—and the managers outside the function who relate to marketers—are not quite prepared for this transformation. They've heard the noise about data-driven marketing, but they're hoping they can retire before they really have to change their entire orientation.

But unless they're well into their sixties, retirement won't help much. Every day, marketing assets become increasingly digitized. Every day, more information about customers' preferences and behaviors becomes available. Every day, the opportunity cost of not pursuing data-driven marketing piles up.

There is both an organizational and an individual imperative for reading this book, internalizing its lessons, and continuing the pursuit of data-driven marketing. At the organizational level, some group of people needs to take the lead within companies in moving toward a data and analytics-focused culture. Marketing, as the function most impacted by the rise of data—and as the most frequent gatherer and user of customer data—is in an excellent position to take the lead and to lead by example. If marketing can target customer promotions, understand the attribution of digital media to sales, and segment to markets of one, the rest of the organization can't help but move in the same data-driven direction.

If marketing takes the lead in this regard, it can also seize an opportunity to take primary responsibility for managing customer interaction data. As you probably realize, marketing is not the only customer-oriented function in most organizations. It shares that responsibility with sales and customer service. My view is that over the next several years, organizations will feel the need to clarify who is really responsible for customer information. If marketing groups can demonstrate that they are adept at managing and using customer information—and making the data accessible to other organizations that need it—there's a good chance that marketing will get the role for the entire organization.

Of course, in order to do that successfully, marketing will need to step up its professionalism in data management. As Arthur points out, that means discipline, a process orientation, and lots of work on data integration. These are not generally traits that are traditionally associated with marketing, so some changes need to be made. Arthur refers to the prediction by Gartner that by the year 2017, marketing organizations will spend more on technology than IT organizations. I am not sure that prediction will come true (and even less sure it will happen on this date), but if it's even close, marketing data management will have to adopt some of the same approaches to data hygiene (security, backup, version control, and so forth) that IT organizations have employed for decades.

There is some irony in the move by marketing into professionally managed information and technology. Over the years, marketers have frequently been guilty of a "renegade" approach to IT. Instead of working with the IT function to create a professional approach to data management, marketers often tried to evade scrutiny by acquiring technology and managing complex data environments on their own. The marketers in question may well have gotten their database up or analyzed their social

media sentiments more quickly and inexpensively. However, this renegade approach has led to fragmented and siloed customer data, as well as some inefficiencies in technology architecture and platform management.

Going forward, it's not that marketing will replace IT in the professional management of data, but will collaborate with it. Indeed, one organization—Arthur's own firm, Teradata—recently combined the jobs of chief marketing officer (CMO) and chief information officer (CIO). Perhaps we will see more such combinations, but in any case we will certainly need to see collaboration. Whenever I meet CMOs who don't work closely with their companies' CIOs, I consider shorting their stock. I can't imagine the companies will be successful if marketing and IT don't get along.

At the individual level, it's now clear that marketers at every level need to embrace technology and data as key elements of their professional portfolios. Everyone needs to know something; some need to know a lot. Every individual marketer needs to stake out a position on the continuum that has traditional, creative, intuitive marketing on one end (a position that is no longer tenable by itself), and hard-core digital data management on the other. If you're on the extreme data-oriented end, you may not look much different from a traditional IT person, although you will happen to specialize in managing customer-oriented data.

Some marketers will need to go back for formal schooling to develop this expertise; others can get by, as Arthur notes, with internal skill development programs within companies. Highly self-motivated individuals may even be able to acquire the needed knowledge by studying the voluminous amount of online information on this topic. Whatever means you choose, acquiring this sort of knowledge takes hard work.

And in marketing, the work to keep up with expanding IT and big data knowledge won't stop for the foreseeable future. It's great that you are reading this book, and Arthur will have provided you with a solid foundation for big data marketing by the time you reach its end. However, the world of data-driven marketing is changing at a dramatic pace. New channels to the customer, new application categories, new types of data to exploit, and new vendors and offerings emerge all the time. To be successful in data-driven marketing, you'll have to become a student of this domain for the rest of your career.

This may seem daunting, but try to look at it as a fantastic time to be in this profession. What could be more stimulating than being in a part of business where the foundations are being shaken on a daily basis? Where

better to be than in the vanguard of this change? Wouldn't you prefer to be a leader of this transformation than to be led by someone else? In short, it's a wonderful time to be a data-driven marketer if you like change, excitement, and new ideas. And if you don't like those things, marketing probably isn't the best place for you anyway!

—Thomas H. Davenport

Introduction

Big data. I've been a marketer since 1984, and never have there been two words that cause more anguish in the C-suite. Over the years, I've seen corporate leaders execute masterful acquisitions, heroic management of budget cuts, aggressive staffing reductions, and other feats of strength. They seem to take most business hurdles more or less in stride, but mention the words *big data*, and the conversation changes. Every member of the C-suite agrees big data is an issue that needs immediate attention. The problem is, very few know what to do about it, and, of course, that indecision just adds to the anxiety. As companies put off formulating their plans, the data continues to stream in, creating massive tangles of information, processes, and applications. The knot grows. Insights and value get buried in all the chaos. Stomachs begin to ache. And no one wants to admit they're falling farther and farther behind.

I want to change that dynamic, and I wrote this book because it's time to open up the conversation about big data. As uncomfortable as it may be, we need to start discussing big data—the good, the bad, and the ugly—without hype, without sales pitches, and without fear. Today's business leaders need to roll up their sleeves and confront the challenge of big data head-on, but in order to do so, they must first have a clear view of the task ahead of them. I truly believe that kind of clarity can only be achieved through honest, real-world dialogue. That's why this book isn't filled with complex mathematical models and lists of confusing statistics. Instead, I chose to focus on what I've discovered as a marketer who's coming of age in the era of big data marketing. I wrote about my mistakes and successes, as well as the triumphs of those I have had the pleasure to learn from along the way. You'll find page after page of practical advice about how to drive the changes required to begin reaping the benefits of big data insights.

If you want your business to move forward, if you're tired of all the sensationalism and hype, if you're ready to ease that knot in your stomach, you've come to the right place. Turn the page. Let's start the conversation.

The Problem

How Did We Get Here?

1

Moving Out of the Dark Ages

More and more, the C-suite feels like a goat rodeo, a chaotic arena of business executives talking over and past one another. In fact, this pandemonium of different agenda and perceptions is now the spectator sport characterizing the Dark Ages of business. Even worse, it often takes only two of us to get the rodeo started.

I've seen this firsthand. One afternoon, while I was working as a chief marketing officer (CMO) at a Silicon Valley technology start-up, I seized the opportunity to talk to the CEO about how we could improve our demand creation and solution adoption. After briefly explaining that more resources would help us segment our market and buyers, I began to lay out my strategy for developing different content and engagement strategies for each unique persona, but, just as I was hitting my stride, the CEO interrupted me.

He was operationally focused, and already, he had heard enough. He looked me straight in the eye. "We don't need to segment the market," he said. "We just need to market."

Instantly, I knew I had failed. I hadn't effectively communicated *why* improving connections and conversations with customers and prospects would add value to the business. Clearly, the CEO didn't understand that messages and offers targeted to different buying personas would yield more eyeballs, more conversions to free trials, and ultimately, more paid subscriptions of software. And since I couldn't provide quantitative proof of the returns from my suggested plan, he certainly wasn't willing to devote any more resources. I knew we needed to invest in data analysis to better understand the market and advance our overall strategy and marketing techniques, but, to this CEO, that request was out of the question.

At the time, I was frustrated. Why didn't he *get it?* Worse, I wasn't sure how—and even *if*—I could help him understand.

Unfortunately, clashes and fly-bys like this happen every day in C-suites and boardrooms around the globe. They're all too common,

and they're indicative of the chasm now separating marketing from the rest of the enterprise. On one side, there are the marketers who understand the intrinsic value of heightened customer engagement. On the other, there are the C-level execs who need to secure funding, drive change, and ease the organization's growing pains—the very aches caused by fragmented data, fragmented systems, and disconnected interaction channels.

Of course, marketers have been envisioning one-to-one relationships with customers for decades. They've always been the consumers' champions, advocating within the C-suite not only for better customer service and support, but also for product developments. When *The One to One Future*, a book by Don Peppers and Martha Rogers, was first published in 1993, it captivated the industry by focusing on the individual customer rather than the market as a whole. This book became the marketer's bible, inspiring new customer relationship strategies and insights into ways to better engage through true one-to-one experiences.

Since then, however, marketers have struggled to make the relevant, targeted, and value-based conversations they have promised real for most brands and their buyers. Even though consumers are clamoring for a more modern approach, the majority of companies continue to deliver just the opposite. From my perspective, that's no surprise. Outdated, ineffective, and ad hoc internal marketing processes, coupled with fragmented and missing data, can only lead to flat, one-size-fits-all messaging and interactions. And these lackluster experiences, in turn, are creating another gap, one that's particularly perilous because it separates brands from their customers at a time when consumer patience is growing thin. How much wider will these chasms grow? How much longer can we stand at the edge of the cliff, secretly hoping the disconnects will somehow resolve themselves?

The Threat of Digital Disruption

We can't wait anymore. A new vision of customer engagement, one that's grounded in personalized, relevant, and consistent communication, must materialize. I'm not talking about simply segmenting markets and targeting messages. I'm appealing to brands to begin true one-to-one interactions with their buyers and prospects. We must market like we communicate in our everyday lives, as one individual to another, as well as to groups or segments. We have to embrace a two-pronged approach that drives

highly relevant, individualized engagements, while also leveraging broader segmentations when it is cost effective and *good enough*. We have to imagine how a personalized experience with our brand, product, or service will benefit and add value to our customers. We have to build that experience, and we have to deliver it—*now*.

Why the urgency? Because companies are facing continued consumer pressure to step-up with compelling experiences *now*—before the competition does—and because today, digital disruption threatens virtually all business models, physical products, and value chain relationships. But what exactly is digital disruption?

Just like most of you, I've been trying to wrap my head around the concept. It's multifaceted, all-encompassing, and difficult to distill into a single sound bite. But, I'll do my best to explain. Here's my definition of digital disruption and what it means to business today: Just as the word "disruption" describes throwing convention into confusion, "digital disruption" describes how technology and data are changing our culture, throwing communication and the physical world of processes and goods into disorder, across all industries.

Every board, every CEO, every CMO—essentially every business executive I talk to—dreads the threat of digital disruption. I've even heard some Fortune 100 executives say they avoid using the term "disruption" when trying to drive change within their companies because the word alone ends up instilling fear rather than motivation.

But, won't validating this fear by ignoring digital disruption cause even more damage? Yes, it will.

As author and business advisor Shelly Palmer told me, no matter what business you're in, your company needs to think strategically about digital disruption. Its impact can be felt everywhere—business-to-business (B2B), business-to-consumer (B2C), supply side, demand side—no business can escape the relentless pace of technological change.[1] According to Palmer, who wrote *Digital Wisdom: Thought Leadership for a Connected World*, companies need to fail fast, fail cheap, and iterate. Long planning cycles have a place, but given the speed that information travels and the dramatic changes in consumer behaviors empowered by technology, an annual or even quarterly review of strategy and execution may be too stagnant. Companies must adopt more flexible and iterative approaches to planning because, as Palmer points out, "the rate of technological change will never be slower than it is today."

In other words, we are entering uncharted waters. "It took 30 years to connect the first two billion people to the Internet; it will take about eight years to connect the next two billion," Palmer said. "This unprecedented level of connectivity will empower new consumer behaviors. Companies and their leaders must adapt, or die!"

Where is digital disruption taking us? The answer will vary from sector to sector. As of this year, 3-D printers can produce a pair of designer sunglasses, an electric guitar body, and even human tissue. This simple example illustrates digital disruption within the manufacturing and durable goods industry where we are moving away from mass production into personalized reproduction. In financial services, digital upstarts and smartphones are challenging the future of banking relationships. Retailers are also navigating disruption as the focus moves from online-only retailers to the impact of omnichannel commerce and the accelerating role of mobile commerce. While some business leaders look to other industries to understand digital disruption, most are wrestling with their own business model threats. Think about it: As consumer power grows, not only are customers controlling the market conversation; they're bound to demand more control of their personal data, as well. The companies that thrive will be the ones that deliver value by building individual relationships with buyers based on trust and shared experiences. Digital disruption will connect business and consumers in new ways, and the winning companies will be the ones that scale the ability to transact with the individual.

Clearly, it's time for all of us—especially marketers—to move past the fear so we can confront digital disruption head on. Why especially marketers? Because marketing has been affected most by the explosion of digital channels and changes to consumer behavior. Plus, marketers are among those who stand to benefit the most from understanding the customer better through data analysis.

After all, digital disruption is not, by definition, a negative occurrence; it is a phenomenon that forces change. Companies can use digital disruption as the imperative to engage customers differently with more personalized, tailored, and data-driven messages across all points of interaction.

The Enlightened Age of Data

How is your company reacting to digital disruption? Do you agree that the C-suite needs to move from the Dark Ages into an Enlightened Age of

Data? Do you believe as I do that marketing needs to lead the way? As I mentioned earlier, marketers have long been the voice of customers within the enterprise, and now CEOs and the rest of the C-suite are counting on marketing to find new sources of revenue and differentiation through more compelling customer engagement and experiences. How should marketers respond?

Marketers must respond by using, leveraging, and applying *data*: Data from customers. Data from prospects. Data from warehouses. Partner data. Sensor data from durable goods. Competitive data. Internal data. External data. All of these data insights can be leveraged to create a competitive advantage. First, companies need to create more holistic views of their data. Then, they need to analyze that information for actionable insights. Finally, they need to put the processes and tools in place that enable them to execute based on those insights.

The bottom line? Marketing needs to be data driven. Let me be more precise. I define data-driven marketing as collecting, analyzing, and executing on insights from structured and multi-structured data (that is, big data) across the enterprise to drive customer engagement. Data-driven marketing is the engine behind improved marketing results, and it creates measurable internal accountability as marketers become more effective in planning, executing, and proving the value of their work.

And keep in mind: Using data to guide and inform does more than engage current customers. Data-driven marketing techniques also capture new customers. In 2011, the Information Technology Services Marketing Association's (ITSMA's) survey results showed that 82 percent of data-savvy marketers report greater market share[2] when using insights to drive marketing. That's proof that more targeted, relevant experiences pay off. Teradata Corporation found similar results in its 2013 survey of more than 1,000 marketers globally. The report, *Global Teradata Data-Driven Marketing Survey, 2013*, concludes that six out of ten marketers (58 percent) believe that a data-driven marketing approach helps them make better decisions.[3] (The complete report is available as a supplemental resource to this book at www.teradata.com/big-data-marketing or at www.bigdatamarketingbook.com.) Figure 1.1 shows how data-driven marketing impacts the overall field of marketing.

Kelly Cook, Senior Vice President of Marketing at Designer Shoe Warehouse (DSW), has seen it happen. When her team needed to reinvigorate the DSW brand and drive growth for shareholders, Cook led
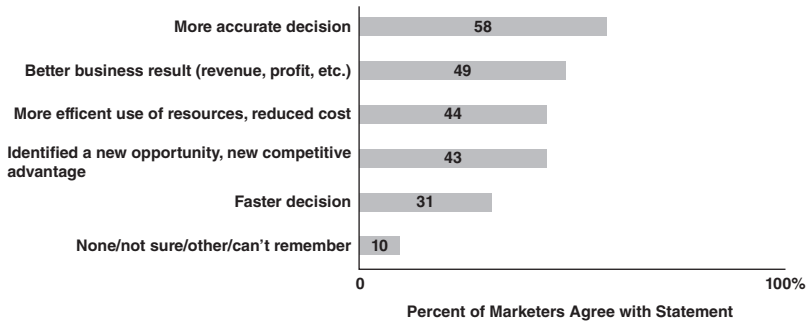
FIGURE 1.1   Benefits of Using Data in Making Decisions
Source: © 2013 "Teradata Data-Driven Marketing Survey, Global" Teradata Corporation.

a data-driven process to chart the consumer journey and deliver more personalized experiences in campaigns, offers, and messages.

"You need a fully integrated strategy being championed from the top of the house," Cook told *Teradata Magazine*. "Then it's just a matter of prioritizing all the things you need to do because believe me, customers have no problem telling you everything you could do better. Knowing what you need to do for customers allows you to understand what data is needed, so you'll know what to attack first."[4]

I believe all marketers must be open to this kind of reorientation. We're in the midst of a renaissance, of sorts, because a cultural shift is necessary to unify, understand, and leverage the enterprise and big data insights needed to drive more compelling, relevant customer engagement across all channels in real-time.

Of course, that's not to say that finding traction amidst all the disruption will be effortless, or even easy. Historians tell us that the Renaissance was a period characterized by inquiry, creativity, and growth juxtaposed with misunderstanding—and even fear—of innovators and their new points of view. I fully expect to see similar dynamics shape the Enlightened Age of Data, as the function of marketing continues to mature. During this renaissance, we're all bound to face skepticism from other smart and seasoned business leaders. Difficult new questions will force us to rethink the very ways we work to build our brands.

Before we move further ahead into the Enlightened Age of Data, let's take a closer look at what's been holding us back.

KEY TERMS

Data-driven marketing: Data-driven marketing is collecting, analyzing, and executing on insights from structured and multi-structured data (for example, big data) across the enterprise to drive customer engagement. Data-driven marketing is the engine behind improved marketing results and creates measurable internal accountability as marketers become more effective in planning, executing, and proving the value of marketing.

Digital disruption: The word "disruption" describes throwing convention into confusion, and "digital disruption" describes how technology and data are changing our culture, throwing communication and the physical world of processes and goods into disorder, across all industries.

Big data: Big data is composed of digital information, including unstructured and multi-structured data, often derived from inter-actions between people and machines such as web applications, social networks, genomics, and sensors. Big data is a continuous stream of information conducive for ongoing discovery and analysis. Industry leaders, like the global analyst firm Gartner[5], use adjectives like "velocity, and variety" as a way to frame the big data discussion.

DOs and DON'Ts

Recognize that the world has changed, and therefore the expectations of marketing have changed. For example, social media is here to stay, mobile is exploding in importance, and customers are savvy, smart, and in control.

Learn to leverage tension in the C-suite to inspire change. Healthy tension can identify the obstacles to charting

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a new course and help you discover better ways to approach old problems. Avoid adding to the goat-rodeo dynamic. Instead, use the debates to build buy-in and alignment.

Commit to moving from the Dark Ages into the Enlightened Age of Data. Embrace the journey to a data-driven marketing organization, one that directs programs and spend with insights based on real-time market response. Then, develop a simple plan to move forward.

Don't assume digital disruption is someone else's problem. Engage in active dialogue across your business, get customer insights now, and begin defining a future state and the key success factors you need to get there. Be the leader driving the data-driven marketing culture. This change can't be delegated. Define a vision and get the help you need to turn it into strategies for your business that drive more value.

Don't boil the ocean. Start with small steps and evolve. I've seen too many projects get sidelined by visions that are too big, coupled with steps that are too complex. Maintain a big and compelling vision, but identify low-hanging fruit for individual projects. For example, decide to increase revenue through better relationship marketing, and then identify the key initiatives that will deliver results.

Don't stagnate. Many projects in marketing are currently self-funded and, due to budget cuts and competing priorities, these initiatives often limp along. Complicating matters even more, it takes time to build credibility among the internal cynics needed to support certain projects. Put focus and resources behind strategic customer engagement projects. Then, staff these initiatives with people who can build relationships. You'll need to leverage expertise and manpower from all parts of the company (not just marketing) to create alignment and move forward.

2

Why Is Marketing Antiquated?

External forces, like the digital disruption I discussed in Chapter 1, aren't the only factors keeping marketers in the Dark Ages. When I talk to marketers one on one or speak with a roomful of business executives, I also hear about a wide range of internal obstacles that prevent companies from leveraging big data insights and developing more personal customer engagement strategies.

Though the details can vary widely, the most common challenges these organizations face include: a lack of collaboration across departments, mercurial market and consumer behaviors, turf wars over customer data ownership, ad hoc processes, declining or stagnant budgets, overspecialized functions, and proliferating channels. These problems are spun from years of ever-changing marketing leadership and a shift in buying practices caused by a variety of factors, most notably, the Internet, mobile devices, social networks, and a global marketplace that is now always on and constantly connected.

Why has marketing lost pace to these challenges? Because in many instances, marketers are unable to clear at least one (and usually more) of these six stubborn hurdles:

- Tactical (versus strategic) marketing
- Manual marketing management
- Silos of data and demand for real-time engagement
- Communicating the value of marketing
- Lack of talent/training
- Fragmented and often missing data

Let's discuss each of these hurdles so you can better understand why it's so difficult for marketing to emerge from the Dark Ages.

Tactical (versus Strategic) Marketing

In many firms, the marketing function is purely tactical. Often, business-to-business (B2B) marketers are focused on supporting sales with lead generation, internal slide development, and content creation for sales-enablement tools. In other companies, marketers are considered the "arts and crafts" department, and their main deliverables are websites and those tedious PowerPoint templates.

By contrast, in forward-thinking firms, a completely different dynamic has taken root. In these companies, the marketing function has evolved from tactical to *strategic*. Here, marketing drives the product and services roadmap, designs the buyers' journey, and essentially, directs the business. Of course, to take on this strategic role, marketers have to embrace an approach that uses data and insights to inform decisions. These firms recognize marketing as a new strategic opportunity and realize it's the foundation for the entire company's success.

Why? Because when marketers shift from tactical to strategic roles, they're empowered to become customer-centric. Guided by this new focus, they start charting the course to innovation and propelling the change that's necessary to compete in today's global marketplace.

As I mentioned earlier, marketers have always been the experts when it comes to understanding customers. The difference is that marketers can now use small and big data analytics to link the customer directly to company revenue. As a result, they can *prove* the value of their strategy and justify changes across the organization.

Manual Marketing Management

Unfortunately, most traditional go-to-market processes impede marketers from participating in high-level strategic planning. Think about it: Each quarter, marketers juggle hundreds of projects and thousands of creative and visual assets. They need a rich variety of content and a wide selection of offers and messages tailored to offline and online audiences. Managed manually, these initiatives devour the workday and leave little time for the strategic big picture. In short, too many marketers are still producing materials by hand using point solutions. Stuck in the Dark Ages, they still waste time scrolling through emails to manage the creative review process.

They still perform manual list uploads to segment and communicate with their target audience. Is it any wonder manual marketers like these are battling irrelevance?

And outdated content creation and review processes are only the tip of the iceberg. Marketing is one of the largest variable spends for most companies today. So I'm baffled that many organizations still manage their sizeable marketing budgets in basic spreadsheets. They don't link each campaign or initiative to its cost and results, and they're far from tracking or reconciling marketing spend to overall corporate financials or objectives. It would be absurd for a global corporation to use Excel workbooks to track its overall finances, so why was it ever considered acceptable for marketing? The pressure on chief marketing officers (CMOs)to prove the return on marketing investment (ROMI) has never been greater, so why is marketing the last frontier to integrate and automate its processes, systems, and data? The antiquated approach of manual project management keeps marketing in the Dark Ages and leaves its true value locked up on spreadsheets and hidden in fractured enterprise systems.

Traditionally, marketing has not been forced to tie its spend and results to overall business goals and metrics. A department that has long been excused from the demands for quantitative rigor, marketing now stands at an inflection point, and in order to move forward, marketers must begin managing the business of marketing. What do I mean by *the business of marketing*? Marketing oversees a large portfolio of assets, including financial and human resources, projects that span the business and geographies, and intellectual property through content and go-to-market strategies. Marketers need to manage these valuable assets with greater discipline and process to assure they are optimizing and driving revenue and competitive advantage at the lowest cost.

Silos of Data and Demand for Real-time Engagement

Consumers are in control. They're demanding real-time responses that are relevant and personalized, and available when, where, and how they want them. This dynamic is driving marketers to fix inherent process bottlenecks so their teams can react to consumers quickly and effectively. Beyond the technology to integrate information from different channels and

customer touchpoints, marketers need the data and content to respond in real time.

Retailers are among the first to deal with this shift in control as the proliferation of mobile devices is revolutionizing the retail shopping experience. A 2012 Teradata study of more than 2,000 consumers[1] found that one in five consumers is now "showrooming," visiting retail stores to try products, then checking a mobile device for the best price online. Of those already showrooming, 33 percent said they ultimately used the information to buy elsewhere. And the trend is only expected to grow. Nearly everyone in the study (96 percent) said they plan to use their smart phone to research prices the same way or more in the future.

How can retailers combat the showrooming trend? As I see it, the brick-and-mortar retailers that succeed will be the ones that change the in-store dynamic. They'll use big data marketing insights to empower employees, so then these employees can treat shoppers they way they want to be treated: as individuals with unique buying behaviors and preferences. For instance, by using data-driven marketing, retailers can learn what each customer values most: whether that's a discount, bonus reward points, an extended warranty, or some other perk. Then, they'll be able to offer that preferred option to the shopper who's showrooming, right then and there, on the sales floor.

Granted, all of this is part of good, old-fashioned customer service—and that may be what today's consumers want most of all! In fact, 85 percent of consumers polled in the 2010 North American Customer Experience Report published by RightNow Technologies said they are willing to pay above the standard price of a product or service to ensure they receive a superior experience.[2]

Other industry sectors are feeling the effects of empowered consumers, too, and fortunately, most companies are not blind to this new consumer clout and the potential business impact of a poor customer experience. In particular, today's social media networks take word of mouth to a whole new level. Here's a case in point: Back in 2009, a disgruntled customer created a YouTube video to describe his bad experience with a well-known brand. The video went viral. More than 500,000 people viewed it in three days, and the bad press reportedly cost the brand $5 million in the first month. Bottom line: Consumers won't remain silent with the power and reach of the Internet and social networks literally at their fingertips—a conclusion verified by survey results released in April 2013. Dimensional

Research found that nearly six in ten of those surveyed (58 percent) said they are more likely to tell others about their customer service experiences today than they were five years ago.[3]

I find that when I poll CMOs and their senior leadership teams, their number-one strategic focus is to provide a more compelling customer experience. My advice is always the same: Focus on the external experience and work inward, improving customer information and data at each interaction point with the explicit goal of adding value for the individual and bolstering the trust that forms the foundation of customer relationships. Essentially, to improve the customer experience, you need to consolidate data, make sure your systems work together, and capture, collect, harmonize, and utilize information to enable more informed and timely engagement across all channels.

Communicating the Value of Marketing

Even when a company's processes are integrated, automated, collaborative, and strategic, there will be tension in the C-suite if employees cannot effectively demonstrate results. These days, there's a laser focus on accountability and transparency, and marketers are expected to deliver a higher degree of performance and metric-driven discipline than ever before. In response, marketing executives are learning to embrace a data-driven marketing culture. They're implementing new technologies to harness big data, integrate operations, and produce credible, tangible metrics. They're nurturing collaborative partnerships, and they're retraining or up-leveling talent to satisfy the demand for analytical skills in almost every modern marketing position.

Even so, communicating the value of marketing isn't always easy. Let me give you a personal example. I worked for nearly seven years at a multinational computer technology corporation in Silicon Valley, California. During my first year, I sat in research and development, where I led global CRM product marketing and frequently debated with senior leadership about how I believed marketing was more than clever words and pretty slide presentations. During this Dark Age of my own career, my colleagues kidded during staff meetings that they needed my "arts and craft" skills. They also jokingly told me to "get out the sock puppets"

whenever I left to speak at external presentations. There is always a whisper of truth in humor, right? Without question, the C-suite at that organization viewed the marketing function as purely tactical—and back then, I didn't have the data I needed to prove my team's value. Now, I know better. Data, process, and content build credibility and demonstrate value . . . and value and revenue are what drive markets.

Lack of Talent and Training

Businesses can't move ahead into the Enlightened Age of Data if they don't leverage big data marketing—and they can't leverage big data marketing without the expertise of data scientists and others trained in skills like computational analysis, predictive modeling, statistics, and the management of big data sets. But, there's a problem: There just aren't enough data pros to fill all the needed positions, and that means opportunities are being lost while companies scramble to fill these crucial roles.

Teradata's most recent BARC Big Data Survey[4] found that most of the companies polled intend to invest in big data technologies; however, a lack of human resources and know-how keeps them from gaining deeper insights. In fact, insufficient technical and analytical expertise is the most imminent challenge when it comes to the use of big data.

The third State of Business Intelligence and Analytics survey echoed those results. In this survey, one-third of employer practitioners reported an overall lack of experience as their most important challenge, followed by insufficient business skills. Insufficient technical skills and a general lack of candidates tied for.[5] How are employers responding? The vast majority (80 percent) of employers surveyed offer supplemental training courses for newly hired workers, ranging from extensive classroom work to mentorship and internships to tuition reimbursement.

Fragmented and Often Missing Data

As you have undoubtedly realized by now, each one of the six hurdles outlined in this chapter is directly related to data. Yes, data holds enormous potential for business value. But, it can also present enormous roadblocks to progress. For example, when data is scattered in siloed systems—or incomplete, or missing, in general—customer relationship management

(CRM) applications fall short of expectations. They fail in their promise to create what many consider marketing's Holy Grail: the 360-degree view of the customer. In fact, most business executives I know laugh out loud when they hear that term because they know achieving that level of scope and specificity has been as elusive as finding Sasquatch, the Loch Ness Monster, or, of course, the Holy Grail. According to the *Global Teradata Data-Driven Marketing Survey, 2013*, only 18 percent of marketers routinely have a single view of all customer interactions.[6] Why so few?

The answer is simply that data fragmentation and data silos have created what I call a "data hairball," my term for the complicated mess of interactions, applications, information, and processes that now plagues a variety of different business functions. At some companies, the data hairball consists of customer information spread across marketing, finance, sales, and customer support departments. At others, it's a snarl of data from marketing service providers (MSPs) and information trapped in channels like separate eCommerce sites, undocumented call center conversations, and web activity that leaves partial data strung across the company and partners. Figure 2.1 illustrates why marketers lack the systems and data they need to work together. As you can see, it's really quite simple. Marketers working in the Dark Ages are frustrated by a fractured hodgepodge of technology and channels. In Chapter 3, I'll explain how this jumble impacts the customer.

CEOs, CMOs, and their teams now wrestle with data hairballs every day. They yearn to capture more insights and drive more relevant content and conversations, and yet, despite their best efforts, the tangles usually just grow bigger and more complex. The uncomfortable reality is that most current information management systems simply aren't up to the task. They can't handle large data sets and they can't perform advanced analytics. Then, as the number and variety of channels and applications continue to explode, these older systems simply fall farther and farther behind.

Sure, many marketers are talking about big data; but very few understand how to tackle it, and even fewer have begun to leverage it within their organizations to inform more strategic, value-based customer engagement strategies. As I'll reveal throughout this book, the true value of big data comes from insights, and those insights are only possible after the integration of data (both traditional and multi-structured) from different sources, such as digital, offline, internal, and external.

Are you ready to dig in deeper? Let's explore the relationship between marketing and data in more detail, starting with the next chapter.
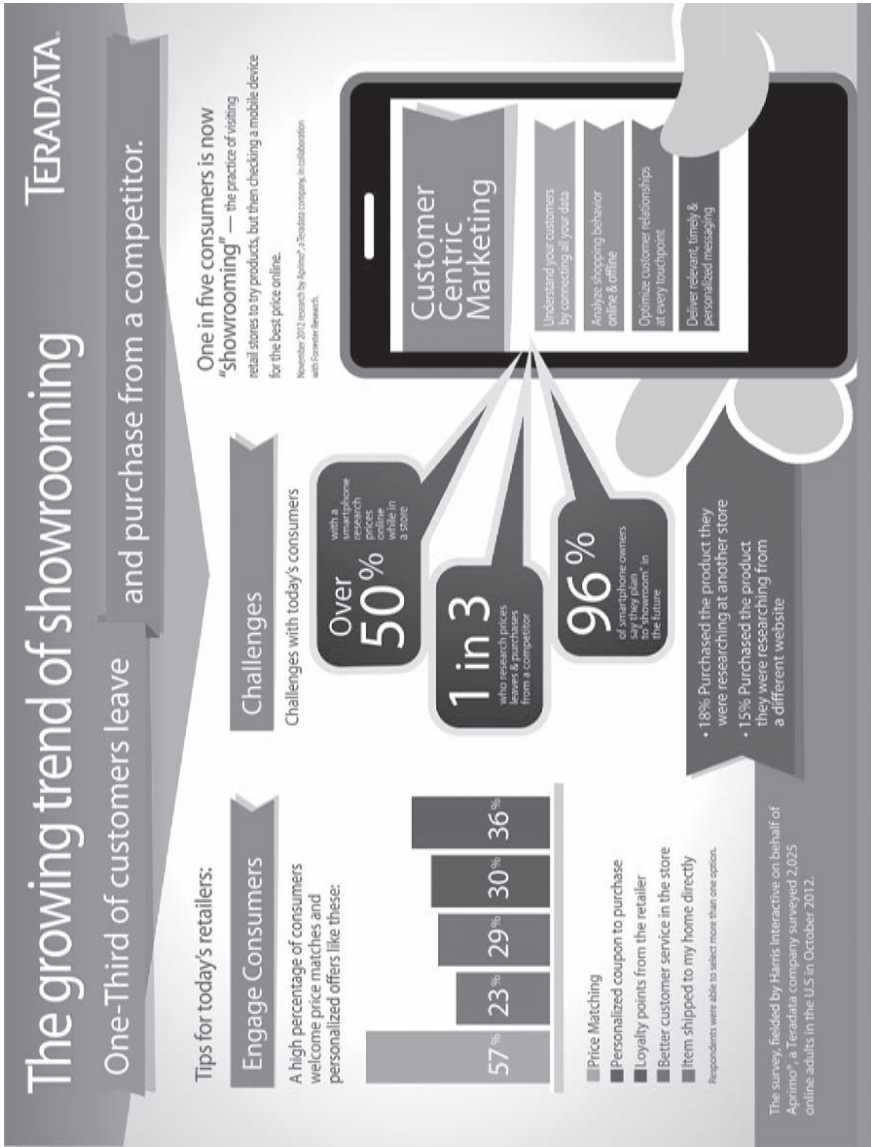
FIGURE 2.1 The Showrooming Trend

Source: © Teradata/Aprimo, 2012

KEY TERMS

Return on Marketing Investment (ROMI): A metric used to measure a marketing initiative's overall effectiveness and contribution to objectives like company revenue. Understanding ROMI helps marketers make better decisions about allocating future investments. This metric is a common language for marketers to communicate the value of their efforts to the rest of the organization. Chapter 9 provides more detail on this concept.

Data hairball: The complicated mess of interactions, applications, information, and processes that results when companies are unprepared to handle information from a wide range of data sources, many of which are not organized in an orderly manner, complicating usage and access.

Showrooming: The practice of visiting retail stores to try products, then checking a mobile device to find the best price online.

DOs AND DON'Ts

Recognize that traditional marketing technologies, processes, and culture need to evolve or risk becoming irrelevant. The modern marketing department must respond, often in real-time, to demands from the C-suite and a growing variety of stakeholders, including customers, collaborators, and vendors. Manual processes and a business-as-usual mindset can no longer keep pace.

Identify where and how your data is fragmented. Begin by appointing a data-savvy, process-driven individual to lead the charge. Map out where data is being generated and where there's influx from new digital channels. Then, build a project

(continued)

(*continued*)

plan for collecting and managing that data. Consider master data management technologies and a strong partnership with IT to make it happen.

Put the customer at the center of all you do. Today's empowered consumers expect personalized, relevant interactions. When was the last time you stood in your customers' shoes and saw what it was like to do business with your company and use your product or service? Take a day or two to experience your company as a customer. One airline refused to allow its leadership team to fly first class to ensure they would understand how the majority of passengers experience their services. Understand the customer journey and inspire your organization and others on how to revolutionize the customer experience.

Don't add unnecessary complexity to the marketing hairball. Plot your course. Create a data management plan to ensure your moves are meaningful. Don't stop collecting data simply because you aren't currently using it. Who knows? It could turn out to be an integral part of the next project to improve customer engagement. Just don't get ahead of yourself. Start small and build as your capabilities improve.

Don't bury your head in the sand. The data hairball may be overwhelming, and you may have a deficit of talent needed today to modernize marketing. Embrace the reality of where your team and data are today and commit to driving change and improving the picture.

Don't accept status quo. Your company might be growing, but if you believe your marketing approaches are outdated, do something about it. Digital disruption requires us to evaluate, execute, and evolve go-to-market strategies. What worked today won't always work tomorrow.

PRAISE FOR BIG DATA MARKETING

"There is both an organizational and an individual imperative for reading this book, internalizing its lessons, and continuing the pursuit of data-driven marketing."

From the Foreward by **TOM DAVENPORT**, Visiting Professor at Harvard Business School, Distinguished Professor at Babson College, Director of Research at the International Institute for Analytics, and Senior Advisor to Deloitte Analytics.

"Lisa Arthur has been an excellent CMO for a long time. Which is why if you're in marketing or in technology or like to read, this is a book you can't miss. She takes a difficult subject— big data—and not only explains it in terms that you can understand, but gives you a practical guide to using big data to gain insights that are valuable to marketers in any area of business. So, stop reading the back cover (and the inside cover) and buy this book and read it cover-to-cover. It is SO worth it."

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"As a former marketing executive, I understand how important the customer experience is *Big Data Marketing*, written by CMO Lisa Arthur, gives the C-Suite and their teams a roadmap and examples of how marketing can use that for their companies to leverage better data, improve go-to-market approaches, and ultimately engage customers more effectively."

PORTER GALE, former VP of Marketing of Virgin America, author of *Your Network Is Your Net Worth*

"Lisa's unbridled passion for her customers and for marketing done right shines through as she makes a cogent argument for the best ways to apply big data to marketing challenges. Lisa doesn't just preach the importance of big data, she illustrates sound principles with solid case studies and examples. A must-read for today's marketing professional."

DR. JEFF TANNER, PHD, Professor of Marketing and Director, Baylor Business Research Collaborative, Hankamer School of Business, Baylor University.

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